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# Mineral Industry Surveys

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## LEAD IN MAY 2003

Domestic mine production, based on the net quantity of lead recovered from concentrate, increased by 7% in May compared with production in April. Secondary refinery production increased by about 1% in May and reported consumption remained essentially unchanged compared with the previous month.

According to Platts Metals Week published quotations, the average North American producer price and the average London Metal Exchange cash price (U.S. dollars) increased by 0.18% and 5.98%, respectively, in May.

Demand for lead in North America continued at a steady pace in May showing little sign of an immediate increase. Some producers were optimistic, however, that a noticeable increase in demand could occur by late summer. In the short term, North American producers, reportedly, were likely to view the European lead market as a more favorable outlet for their product. The overall European supply-demand picture for the coming months remained unclear, given the factors of increased lead imports, the recent closure of two large smelter-refineries, and some increasing evidence of declining demand for lead (Ryan's Notes, 2003).

The Battery Council International Conference, held in May, provided an informative outlook for the lead-acid battery industry worldwide. Demand for replacement automotive-type batteries was expected to decrease in the North American market through 2007, mainly as a result of improvements that are extending the life of batteries. In the original equipment market, consolidation among motor vehicle producers and retailers and a trend toward globalization will require that battery manufacturers also consolidate and become more globally oriented. Vehicle production outside of North America is expected to increase significantly through 2007, specifically in Asia and South America. In the Western European market, declining vehicle production during 2003 has placed the demand for original equipment batteries in a slow-growth mode. However, rising vehicle production in Eastern Europe will likely offset some of this decline, resulting in more demand stability in the overall European market. Demand for industrial batteries will continue to be down in both the North American and European markets, mainly as a result of slow growth in the telecommunications sector and delayed investment in third-generation mobile phone infrastructures (CRU International Ltd., 2003).

The National Defense Stockpile aggregated cash disposal (sale) of lead in May under the monthly Basic Ordering Agreement, DLA-Lead-005, was 3,850 metric tons (t) (4,244 short tons). In addition, 8,800 t (9,700 short tons) were sold under a Long-Term Solicitation of Offers, DLA-Lead-004 (U.S. Defense National Stockpile Center, 2003). Sales in the first 8 months of fiscal year 2003 (October 2002 through May 2003) totaled 46,563 t (51,327 short tons).

The U.S. paint industry and most of the nation's State Attorneys General announced an agreement in May to reduce the hazard from lead-containing paint. The agreement will require uniform stickers or labels on new paint cans warning consumers of the dangers associated with dust from old paint that may be disturbed during home renovations. The agreement also will fund a national training program to instruct individuals on safe methods for eliminating lead paint in old homes and to provide discounts on the cost of certain equipment used in the removal of old paint (Washington Post, 2003).

Canada's Vancouver-based Western Silver Corp. has reported a new higher-grade zone of mineralization from a continued drilling program at its Penasquito polymetallic property in Zacatecas State, Mexico. Lead concentrations ranging from 1.16% to 9.11% were intersected at this new zone, named La Palma. Drilling is continuing at areas of known mineralization as well as new areas that might extend the mineralization at Penasquito (Mining Journal, 2003).

### References Cited

CRU International Ltd., 2003, Consumption Trends: CRU Monitor—Lead, June, p. 10.

Kaufman, Marc, 2003, States, paint industry agree on lead warnings: Washington Post, May 13, p. A5.

Mining Journal, 2003, New Penasquito zone: Mining Journal, v. 340, no. 8737, May 23, p. 353.

Ryan's Notes, 2003, Pb imports not popular with EC producers: Ryan's Notes, v. 10, no. 19, May 12, p. 4.

U.S. Defense National Stockpile Center, 2003, Stockpile accepts lead offers: Fort Belvoir, VA, U.S. Defense National Stockpile Center news release, May 7, 1 p.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES[1]

(Metric tons, lead content, unless otherwise specified)

| | 2002 | | 2003 | | |
|---|---|---|---|---|---|
| | Year[p] | January - May | April | May | January - May |
| Production: | | | | | |
| Mine (recoverable) | 440,000 | 189,000 | 36,200 | 38,800 | 188,000 |
| Primary refinery | 262,000 | NA | NA | NA | NA |
| Secondary refinery: | | | | | |
| Reported by smelters/refineries | 1,100,000 | 443,000 | 83,000 [r] | 84,200 | 426,000 |
| Estimated | -- | 4,470 | 838 [r] | 850 | 4,300 |
| Recovered from copper-base scrap[e] | 13,500 | 6,250 | 1,250 | 1,250 | 6,250 |
| Total secondary | 1,120,000 | 454,000 | 85,100 [r] | 86,300 | 437,000 |
| Stocks, end of period: | | | | | |
| Primary refineries | NA | NA | NA | NA | NA |
| Secondary smelters and consumers | 105,000 | 80,700 | 81,600 | 84,300 | 84,300 |
| Imports for consumption: | | | | | |
| Ore and concentrates | 6 | -- | -- | NA | -- [2] |
| Refined metal | 210,000 | 97,500 | 14,900 | NA | 61,900 [2] |
| Consumption: | | | | | |
| Reported | 1,440,000 | 617,000 | 109,000 [r] | 109,000 | 571,000 |
| Undistributed[e] | -- | 61,100 | 10,800 [r] | 10,700 | 56,500 |
| Total | 1,440,000 | 679,000 | 120,000 [r] | 119,000 | 628,000 |
| Exports: | | | | | |
| Ore and concentrates | 241,000 | 37,200 | 21,200 | NA | 51,900 [2] |
| Bullion | 256 | 95 | 12 | NA | 343 [2] |
| Wrought and unwrought lead | 43,200 | 12,000 | 7,970 | NA | 25,200 [2] |
| TEL/TML preparations, based on lead compounds | 516 | 215 | 60 | NA | 187 [2] |
| Exports (gross weight): Scrap | 106,000 | 46,000 | 9,750 | NA | 33,100 [2] |
| Platts Metals Week North American producer price (cents per pound) | 43.56 | 43.64 | 43.52 | 43.60 | 43.57 |

[e]Estimated. [r]Revised. [p]Preliminary NA Not available. -- Zero.

[1]Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

[2]Includes data for January - April only; May data were not available at time of publication.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

| | North American producer price | LME | | Sterling exchange rate |
|---|---|---|---|---|
| | cents/lb | $/metric ton | £/metric ton | dollars/£ |
| 2002: | | | | |
| May | 43.56 | 451.52 | 309.30 | 1.459814 |
| December | 43.54 | 443.22 | 279.41 | 1.586295 |
| Year | 43.56 | 452.29 | 301.96 | 1.503145 |
| 2003: | | | | |
| March | 43.58 | 456.36 | 288.38 | 1.582471 |
| April | 43.52 | 436.98 | 277.65 | 1.573873 |
| May | 43.60 | 463.10 | 285.45 | 1.622352 |

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP[1]

(Metric tons, gross weight)

| Item | Stocks April 30, 2003 | Net receipts | Consumption | Stocks May 31, 2003 |
|---|---|---|---|---|
| Battery-lead | 16,600 | 83,700 | 83,600 | 16,700 |
| Soft lead | W | W | W | W |
| Drosses and residues | 1,530 | 3,820 | 3,910 | 1,440 |
| Other[2] | 1,620 | 2,570 | 2,060 | 2,130 |
| Total | 19,700 | 90,100 | 89,600 | 20,300 |
| Percent change from preceding month | XX | -0.8 | -2.3 | +2.8 |

W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap not elsewhere classified.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM LEAD-BASE SCRAP
IN MAY 2003[1]

(Metric tons)

| Product recovered | Secondary metal content | | |
|---|---|---|---|
| | Lead | Tin | Antimony |
| Soft and calcium lead | 60,300 | -- | -- |
| Remelt lead | W | W | W |
| Antimonial lead | 23,200 | W | W |
| Other[2] | W | W | -- |
| Total lead-base | 84,200 | 45 | 383 |

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

[1]Data are rounded to no more than three significant digits.

[2]Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 5
CONSUMPTION OF LEAD IN THE UNITED STATES[1]

(Metric tons, lead content)

| Uses | 2002 | | 2003 | | |
|---|---|---|---|---|---|
| | Year[p] | January - May | April | May | January - May |
| Metal products: | | | | | |
| Ammunition, shot and bullets | 57,600 | 18,800 | 3,170 | 3,110 | 14,600 |
| Brass and bronze, billet and ingots | 2,730 | 889 | 238 | 348 | 1,250 |
| Cable covering, power and communication and calking lead, building construction | 3,550 | 1,560 | 499 [r] | 461 | 2,080 |
| Casting metals | 34,800 | 3,260 | 448 [r] | 447 | 2,460 |
| Sheet lead, pipes, traps and other extruded products | 27,900 | 7,630 | 1,260 [r] | 1,400 | 7,670 |
| Solder | 6,450 | 726 | 178 | 169 | 889 |
| Storage batteries, including oxides | 1,190,000 | 548,000 | 97,700 [r] | 97,100 | 511,000 |
| Terne metal, type metal, and other metal products[2] | 24,600 | 821 | 9 | 5 | 30 |
| Total metal products | 1,350,000 | 582,000 | 104,000 [r] | 103,000 | 540,000 |
| Other oxides and miscellaneous uses | 86,200 | 35,400 | 5,580 [r] | 5,610 | 31,100 |
| Total reported | 1,440,000 | 617,000 | 109,000 [r] | 109,000 | 571,000 |
| Undistributed consumption[e] | -- | 61,100 | 10,800 [r] | 10,700 | 56,500 |
| Grand total | 1,440,000 | 679,000 | 120,000 [r] | 119,000 | 628,000 |

[e]Estimated. [p]Preliminary. [r]Revised. -- Zero.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

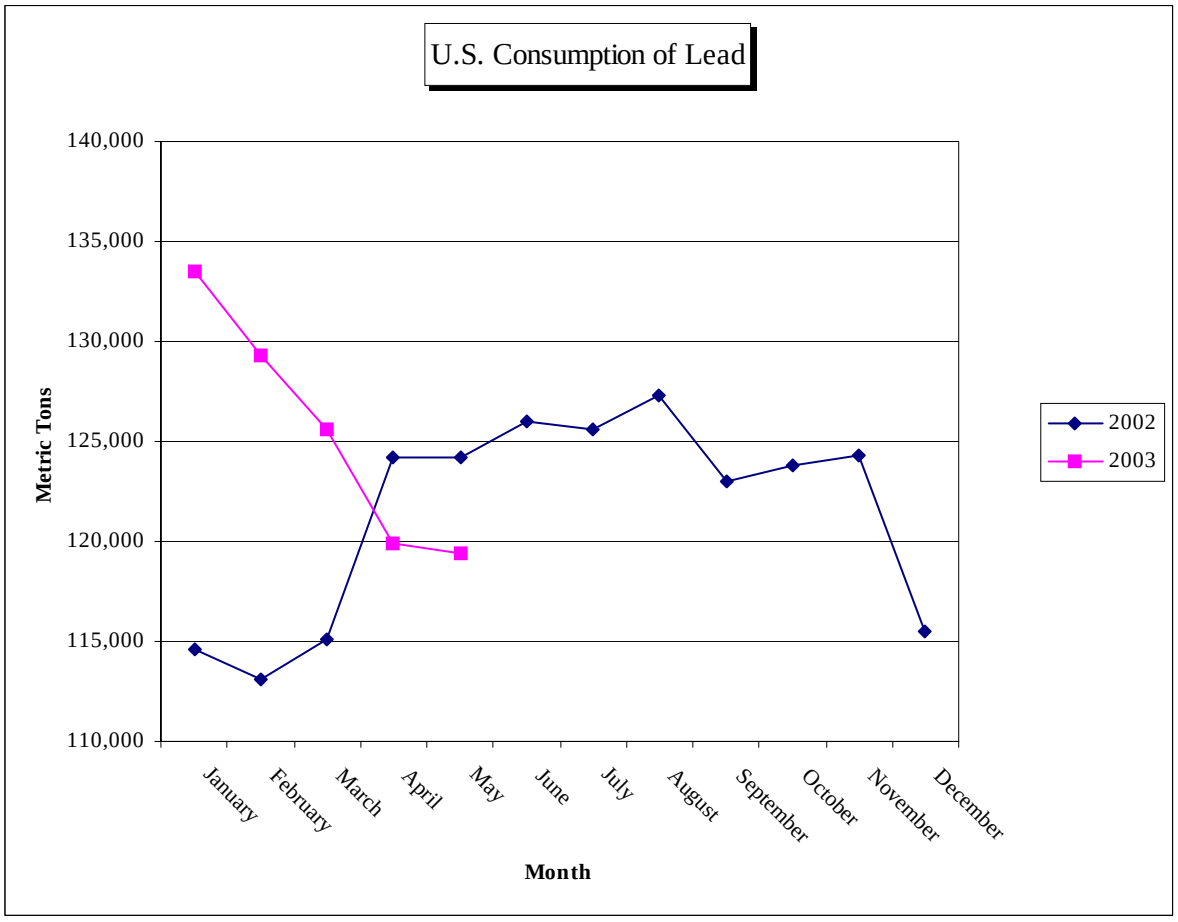

TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD[1]

(Metric tons, lead content)

| Type of material | Stocks April 30, 2003 | Net receipts | Consumption | Stocks May 31, 2003 |
|---|---|---|---|---|
| Soft lead | 39,300 [r] | 62,900 | 61,400 | 40,800 |
| Antimonial lead | 27,900 [r] | 27,000 | 25,400 | 29,600 |
| Lead alloys | W | 21,700 | 21,700 | W |
| Copper-base scrap | W | 63 | 64 | W |
| Total | 81,100 [r] | 112,000 | 109,000 | 84,300 |

[r]Revised.
W Withheld to avoid disclosing company proprietary data; included in "Total."
[1]Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 7
U.S. EXPORTS OF LEAD, BY CLASS[1]

(Metric tons)

| | 2002 | | 2003 | | |
|---|---|---|---|---|---|
| | Year | April | March | April | January - April |
| Lead content: | | | | | |
| Ore and concentrates | 241,000 | 29,000 | 2,190 | 21,200 | 51,900 |
| Bullion | 256 | 95 | 208 | 12 | 343 |
| Materials excluding scrap | 43,200 | 9,020 | 4,020 | 7,970 | 25,200 |
| TEL/TML preparations, based on lead compounds | 516 | 108 | 66 | 60 | 187 |
| Total | 285,000 | 38,200 | 6,480 | 29,200 | 77,600 |
| Gross weight: Scrap | 106,000 | 34,500 | 9,500 | 9,750 | 33,100 |

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 8

U.S. IMPORTS OF LEAD BY TYPE OF MATERIALS AND BY COUNTRY OF ORIGIN[1]

(Metric tons, lead content)

| | General imports | | | | | Imports for consumption | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2002 | | 2003 | | | 2002 | | 2003 | | |
| Country of origin | Year | January - April | March | April | January - April | Year | January - April | March | April | January - April |
| Ore, matte, etc.: | | | | | | | | | | |
| Other | 6 | -- | -- | -- | -- | 6 | -- | -- | -- | -- |
| Total | 6 | -- | -- | -- | -- | 6 | -- | -- | -- | -- |
| Pigs and bars: | | | | | | | | | | |
| Australia | 43,700 | 13,800 | -- | -- | 10,100 | 2,630 | 2,630 | -- | -- | -- |
| Canada | 172,000 | 53,900 | 16,200 | 14,200 | 56,700 | 172,000 | 53,900 | 16,200 | 14,200 | 56,700 |
| China | 28,200 | 19,400 | -- | -- | -- | 28,200 | 19,400 | -- | -- | -- |
| Germany | 185 | 73 | -- | -- | -- | 185 | 73 | -- | -- | -- |
| Mexico | 7,460 | 2,480 | 1,550 | 630 | 5,060 | 7,460 | 2,480 | 1,550 | 630 | 5,060 |
| Other | 246 | 155 | 13 | 24 | 41 | 94 | 3 | 13 | 24 | 41 |
| Total | 251,000 | 89,800 | 17,800 | 14,900 | 72,000 | 210,000 | 78,500 | 17,800 | 14,900 | 61,900 |
| Reclaimed scrap, including ash and residues | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Grand total | 251,000 | 89,800 | 17,800 | 14,900 | 72,000 | 210,000 | 78,500 | 17,800 | 14,900 | 61,900 |

-- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.